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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/607,184	06/26/2003	David L. Patton	83891AF-P	6177

7590 02/23/2007  
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EXAMINER
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LE, BRIAN Q

ART UNIT	PAPER NUMBER
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2624

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/23/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

## Office Action Summary

**Application No.**

10/607,184

**Applicant(s)**

PATTON ET AL.

**Examiner**

Brian Q. Le

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 07 December 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 12/07/2006 has been entered.

**Response to Amendment and Arguments**

2. Applicant's arguments with regard to claims 1-8 have been fully considered, but are not considered persuasive because of the following reasons:

Regarding claim 1, the Applicant argues (page 4 of the Remarks) that Kaplan fails to teach or suggest at least reading micro-discrete indicia using near-field optics. As disclosed in the previous Final Office Action claimed 08/28/2006, the Examiner uses both references Kaplan and Froehlich as a combination under 35 U.S.C. 103(a) to rejection this claim limitation. The Applicant is suggested to refer back to the Office Action for further explanation. The Applicant further argues (page 4 of the Remarks) Kaplan does not teach or suggest locating a user-created unique micro-discrete indicia on said gemstone. The Examiner respectfully disagrees, Kaplan teaches a concept wherein an operator can design a marking/inscription/writing (column 3, lines 13-16) on the gemstone (column 3, lines 25-38) which clearly can be interpreted as user-created unique micro-discrete indicia (comparison between reading indicia and retrieved metric at micron scale) (column 8, lines 50-55 and column 16, lines 45-50).

Thus, the rejections of all of the claims are maintained.

***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 1-8 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Regarding claim 1, the support for the amended limitation “a user-created unique” micro-discrete indicia on said gemstone is found in the original disclosure. The Applicant is required to point out exactly page number and line number of the support.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Kaplan U.S. Patent No. 6,211,484 and further in view of Froehlich et al. “A Near-field Scanning Optical Microscope for Analysis of Magneto-Optic Media”, I.E.E.E. Optical Memory and Optical Data Storage, 1993, pages: 83-84.

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Regarding claim 1, Kaplan teaches a method for reading a micro-discrete indicia (comparison between reading indicia and retrieved metric at micron scale) (column 8, lines 50-55 and column 16, lines 45-50) on gemstone (column 1, lines 13-15) comprising the locating a user-created (a concept wherein a operator can design a marking/inscription/writing) (column 3, lines 13-16) unique micro-discrete indicia on said gemstone (measuring gemstone's characteristics and locating indicia by coordinate) (column 8, lines 50-65 and column 4, lines 45-50). Further, Kaplan also uses a microscope in the reading of user-created unique (column 3, lines 13-16) the indicia on the gemstone (column 12, lines 20-26). However, Kaplan does not explicitly teach the reading of micro-discrete indicia using near-field optics. Froehlich teaches the utilization of near-field optic of the microscopy (provides the capability of reading micro-discrete indicia) (page 83, first paragraph). Modifying Kaplan's method of providing micro-discrete indicia on gemstone would able to provide the reading ability (scanning/measurements) of micro-discrete indicia using near-field optics to exceed the far-field diffraction limit compared to the use of an objective lens in convention optical microscopy (page 83, first paragraph). Using this suggestion, one of ordinary skill in the art, would have been motivated to replace the microscope of Kaplan with the device of Froehlich. This would improve processing and therefore, it would have been obvious to one of the ordinary skills in the art to modify Kaplan according to Froehlich.

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Regarding claim 2, Kaplan teaches a method wherein said micro-discrete indicia is located (as discussed) initially located using an eye-loop (jeweler's loupe) (column 8, lines 30-35) or microscope (FIG. 6, element 68).

For claim 3, Kaplan further teaches a method wherein said micro-discrete indicia is located by using predetermined coordinates (initially positioned) associated with the characteristics of said gemstone (column 4, lines 48-60) (column 1, lines 13-16).

Referring to claim 4, Kaplan also teaches a method where a document (column 8, lines 14-18 and column 4, lines 13-21) is provided that designates the appropriate coordinates of the micro-discrete indicia of said gemstone (column 4, lines 48-60).

Regarding claim 5, Kaplan teaches a method wherein said characteristics of said gemstone used to locate said indicia is selected from of the following size (column 13, lines 31-37).

For claim 6, Kaplan discloses a method wherein said micro-discrete indicia is used for authenticating an occasion of said gemstone (column 13, lines 34-47).

Referring to claim 7, Kaplan teaches a method wherein said authentication identifies the quality and type of gemstone (face value) (column 6, lines 60-64).

For claim 8, Kaplan further teaches the scanning said gemstone (microscope scans gemstone) (FIG. 6, element 68).

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**Contact Information**

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian Q. Le whose telephone number is 571-272-7424. The examiner can normally be reached on 8:30 A.M - 5:30 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mathew Bella can be reached on 571-272-7778. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Brian Le', with a stylized, flowing script.

Brian Le  
February 14, 2007